

CHAPTER 25. ZONING.

DIVISION A. IN GENERAL.

ARTICLE VI.D. Solar Energy Systems.

§ 25-70. Purpose.

§ 25-70.1 Definitions.

§ 25-70.2 Applicability.

§ 25-70.3 Use of Consultant.

§ 25-70.3 Uses permitted by Special Use Permit by the Board of Zoning Appeals.

§ 25-70.4 Uses permitted by Special Use Permit by the Board of Supervisors.

§ 25-70.5 Applications and Procedures.

§ 25-70.6 Location, Appearance and Operation of a Project Site.

§ 25-70.7 Safety and Construction.

§ 25-70.8 Decommissioning.

§ 25-70.9 Bonding.

CHAPTER 25. ZONING.
DIVISION A. IN GENERAL.
ARTICLE VI.D. Solar Energy Systems.

§ 25-70. Purpose

The purpose of this ordinance is to provide for the siting, development and decommissioning of solar energy systems, as a principal land use in Augusta County, subject to reasonable conditions that promote and protect the public health, safety and welfare of the community while promoting development of renewable energy resources.

§ 25-70.1 Definitions

Applicant means the owner or operator who submits an application to the locality for a permit to install a solar energy system under this ordinance.

Disturbance Zone means the area within the site directly impacted by construction and operation of the solar energy project.

Integrated PV means photovoltaics incorporated into building materials, such as shingles.

Landowner means the person who owns all or a portion of the real property on which a solar energy project is constructed.

Non-participating landowner means a person who owns real property that may be affected by a solar energy project and is not under lease or other property agreement with the owner or operator of the solar energy system.

Operator means the person responsible for the overall operation and management of a solar energy system.

Owner means the person who owns all or a portion of a solar energy system.

Photovoltaic or PV means materials and devices that absorb sunlight and convert it directly into electricity by semiconductors.

Rated capacity means the maximum capacity of a solar energy project based on the sum total of each photovoltaic system's nameplate capacity.

Site means the area containing a solar energy system.

Small solar energy system. An energy conversion system, operating as a principal land use, consisting of photovoltaic panels, support structures, and associated control, conversion, and transmission hardware occupying less than one-half acre of total land area.

Large solar energy system. An energy conversion system, operating as a principal land use, consisting of photovoltaic panels, support structures, and associated control, conversion, and transmission hardware occupying one-half acre or more of total land area. Also known as solar energy arrays or solar energy farms.

§ 25-70.2 Applicability

This ordinance applies to all solar energy systems, operating as principal land uses, proposed to be constructed after the effective date of this ordinance. Solar energy systems constructed prior to the effective date of this ordinance shall not be required to meet the requirements of this ordinance.

§25-70.3. Use of consultant

The County reserves the right to employ the services of an energy consultant to review all applications. All applicable costs will be the responsibility of the applicant. The recommendations of the consultant will be considered by the Board of Supervisors in making their decision as to whether or not to issue a Special Use Permit for a solar energy system.

§ 25-70.3 Uses permitted by Special Use Permit by the Board of Zoning Appeals

The uses listed in this section shall be permitted within the General Agriculture, General Business, and General Industrial zoning districts only upon the issuance of a Special Use Permit by the Board of Zoning Appeals pursuant to the provisions of ARTICLE LVIII of this chapter.

- A. General standards applicable to all Special Use Permits. No Special Use Permit shall be issued without consideration that, in addition to conformity with any standards set forth in this chapter for Special Use Permit uses, the following general standards will be met either by the proposal made in the application or by the proposal as modified or amended and made part of the Special Use Permit:
1. Conformity with Comprehensive Plan and policies. The proposal as submitted or as modified shall conform to the Comprehensive Plan of the county or to specific elements of such plan, and to official policies adopted in relation thereto, including the purposes of this chapter.
 2. Impact on neighborhood. The proposal as submitted or as modified shall not have undue adverse impact on the surrounding neighborhood.
 3. Small solar energy systems shall be permitted in General Agriculture (GA), General Business (GB), and General Industrial (GI) zoning districts subject to compliance with this article.

B. Standards applicable to small solar energy systems

1. Setbacks. All equipment and accessory structures associated with the small solar energy system shall be setback twenty five (25') feet from side and rear property lines and fifty (50') feet from the right of way of any public or private street, **unless the Board of Zoning Appeals determines that a greater setback would more adequately protect adjoining land uses.**

Setback areas shall be kept free of all structures and parking lots.

- a) Setbacks shall not be required along property lines adjacent to other parcels which are part of the solar energy system; however, should properties be removed from the system, setbacks must be installed along all property lines of those properties remaining within the project and which are adjacent to a parcel which has been removed.
2. Ground-mounted systems shall not exceed fifteen (15) feet in height when oriented at maximum tilt.
3. Site control. The applicant shall submit documentation of the legal right to install and use the proposed system at the time of application.
4. Solar energy systems shall meet or exceed all applicable federal and state standards and regulations.
5. Signs. No signs or advertising of any type may be placed on the small solar energy system unless required by any state or federal agency.
6. The applicant shall submit documentation that the design of any buildings and structures associated with or part of the solar energy system complies with applicable sections of the Virginia Uniform Statewide Building Code (USBC) (13VAC5-63). This requirement includes all electrical components of the solar energy system.
7. Any glare generated by the system must be mitigated or directed away from an adjoining property or from any road when it creates a nuisance or safety hazard.
8. The parcel shall have frontage on a state maintained road or the expected traffic on a legal right of way can be accommodated by the intersection with the state maintained road per approval by the Virginia Department of Transportation.

§ 25-70.4 Uses permitted by Special Use Permit by the Board of Supervisors

The uses listed in this section shall be permitted within the General Agriculture and General Business zoning districts, **and not** in the General Industrial zoning districts, only upon the issuance of a Special Use Permit by the Board of Supervisors pursuant to the provisions of ARTICLE LVIII of this chapter.

A. General standards applicable to all Special Use Permits.

No Special Use Permit shall be issued without consideration that, in addition to conformity with any standards set forth in this chapter for Special Use Permit uses, the following general standards will be met either by the proposal made in the application or by the proposal as modified or amended and made part of the Special Use Permit:

1. Conformity with Comprehensive Plan and policies. The proposal as submitted or as modified shall conform to the Comprehensive Plan of the county or to specific elements of such plan, and to official policies adopted in relation thereto, including the purposes of this chapter.
2. Impact on neighborhood. The proposal as submitted or as modified shall not have undue adverse impact on the surrounding neighborhood.

B. Large Solar Energy Systems shall be permitted by a Special Use Permit provided that:

1. The primary use of the system is electrical generation to be sold to the wholesale electricity markets and not used primarily for the onsite consumption of energy by a dwelling or commercial building.

§ 25-70.5 Applications and Procedures

In addition to the requirements of article LXVII, "Site Plan Review," and article LVIII, "Special Use Permits Procedures," applications for a large solar energy system shall include the following information:

A. Community Meeting

Prior to submittal of an application, the applicant shall hold a meeting to inform the community about the planned solar energy system installation. Said meeting shall be open to the public. Notice of the date, time, and location of the meeting, as well as a contact name and phone number of the project representative and a summary of the request, shall be delivered by first class mail to all property owners as noted in the Augusta County tax records within one (1) mile of the perimeter of the project. Such notice shall be mailed so as to be delivered at least five (5) and no more than twenty-one (21) working days prior to the community meeting. Upon conclusion of the community meeting, a mailing list of property owners notified, a sign-in sheet from

the meeting, an agenda from the meetings, and a written summary of the meeting shall be included with the application.

B. Project description

A narrative identifying the applicant and describing the proposed solar energy system, including an overview of the project and its location; approximate rated capacity of the solar energy system; the approximate number, representative types and expected footprint of solar equipment to be constructed; and a description of ancillary facilities, if applicable.

C. Submission of a Cost Benefit Analysis

An assessment of the impact on the immediate vicinity of the proposed solar energy system as well the greater Augusta County community shall be submitted by a professional.

D. Site plan.

The site plan shall conform to the preparation and submittal requirements of article LXVII, "Site Plan Review," including supplemental plans and submissions, and shall include the following information:

1. Property lines and setback lines.
2. Existing and proposed buildings and structures, including location(s) of the proposed solar equipment.
3. Existing and proposed access roads, drives, turnout locations, and parking.
4. Location of substations, electrical cabling from the solar systems to the substations, accessory equipment, buildings, and structures, including those within any applicable setbacks.
5. Additional information may be required, as determined by the Zoning Administrator, such as a scaled elevation view and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed solar energy project from potentially sensitive locations as deemed necessary by the Zoning Administrator to assess the visual impact of the project, landscaping and screening plan, coverage map, and additional information that may be necessary for a technical review of the proposal.
6. Documentation shall include proof of control over the land or possession of the right to use the land in the manner requested. The applicant may redact sensitive financial or confidential information.

7. The application shall include a decommissioning plan and other documents required by Section 25-70.8 of this ordinance.
8. The applicant shall provide proof of adequate liability insurance for a large solar energy system at the time of application.

§ 25-70.6 Location, Appearance and Operation of a Project Site

A. Visual impacts

The applicant shall demonstrate through project siting and proposed mitigation, if necessary, that the solar project minimizes impacts on the visual character of a scenic landscape, vista, or scenic corridor.

- B. Ground-mounted systems shall not exceed fifteen (15) feet in height when oriented at maximum tilt.

C. Signage.

Warning signage shall be placed on solar equipment to the extent appropriate. Solar equipment shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar energy project. All signs, flags, streamers or similar items, both temporary and permanent, are prohibited on solar equipment except as follows: (a) manufacturer's or installer's identification; (b) appropriate warning signs and placards; (c) signs that may be required by a state or federal agency; and (d) signs that provide a 24-hour emergency contact phone number.

D. Noise.

Audible sound from a solar energy system shall not exceed 60 dBA (A-weighted decibels), as measured at any adjacent non-participating landowner's property line. The level, however, may be exceeded during short-term exceptional circumstances, such as severe weather.

E. Setbacks.

All equipment, accessory structures and operations associated with a large solar energy system shall be setback at least two-hundred feet (200') from all property lines and at least one thousand feet (1,000') from any residentially zoned properties; **unless the Board of Supervisors is satisfied that different setbacks are adequate to protect neighboring properties.**

1. Setbacks shall be kept free of all structures and parking lots.

2. Setbacks shall not be required along property lines adjacent to other parcels which are part of the solar energy system; however, should properties be removed from the system, setbacks must be installed along all property lines of those properties remaining within the project and which are adjacent to a parcel which has been removed.

F. Ocular impact study.

An ocular impact study shall be performed for airports within five miles of the project site, for public roads within sight of the system, and from scenic highways and overlooks. The analysis shall be performed using FAA Solar Glare Hazard Analysis Tool (SGHAT) to demonstrate compliance with FAA standards for measuring ocular impact.

G. Buffering.

A buffer yard shall be provided and maintained adjacent to any property line, except those property lines interior to the solar energy system, and landscaped in one (1) of two (2) ways. If a property ceases being used for the solar energy system, buffering will be required along all property lines adjacent to the property which has been removed.

Alternative 1: A ten foot (10') wide strip of land with a six foot (6') opaque privacy fence, wall, berm or combination thereof. Opaque privacy fences shall be construction of good quality materials such as vinyl, pressure treated lumber, brick, stone, or similar materials approved by the Zoning Administrator. For the purposes of this chapter tarps, car covers tents, fabric, chain link fences with slats, or similar materials shall not be deemed to satisfy the requirements of opaque fencing.

Alternative 2: A twenty foot (20') wide strip of land with 2 evergreen trees, 2 canopy trees, 2 understory trees and 24 shrubs planted per fifty linear feet (50') of buffer. The trees shall be a minimum of six feet (6') at the time of planting and the shrubs shall be a minimum of eighteen inches (18'') at the time of planting.

A. The applicant is free to choose from Alternatives 1 or 2. Buffers planted below overhead utility lines shall apply any of the allowed buffer alternatives, except that understory trees shall replace any canopy trees at a rate of two (2) understory trees per required canopy tree.

B. Plant and structure location within buffer. The placement of required plants and structures shall be the decision of the applicant; however, they shall be located so as to achieve the maximum level of protection. Plant material shall meet the buffer requirements every fifty feet (50'). Buffer areas not retained in native habitat shall be seeded or sodded with lawn and maintained at a height of no more than 15 inches, established with

ground cover, or mulched with organic mulch. Inorganic ground cover shall not exceed fifty percent (50%) of the total required area of the buffer.

C. Where a fence or wall is used as part of a buffer, the decorative side of the fence or wall shall be faced to the adjacent property.

D. Permitted structures in buffer area.

1. Where walls are placed within any required buffer area:
 - a. No walls of exposed concrete block are permitted, whether painted or not.
 - b. The applicant shall be required to demonstrate provisions for access and maintenance of landscaping and the wall structure at the time of site plan approval.
 - c. Breaks in the wall may be provided for pedestrian and vehicular connections to adjacent developments.
2. Where berms are placed within any required buffer area:
 - a. A berm or combination of materials such as a berm and a fence shall be a minimum six feet (6') in height.
 - b. Berms shall have slopes of not less than three feet (3') horizontal for each one foot (1') vertical.
 - c. Slopes in excess of three feet (3') horizontal for each one foot (1') vertical may be permitted if sufficient erosion control methods are taken and deemed by the Zoning Administrator to be maintainable.
3. Where opaque privacy fences are placed within any required buffer area:
 - a. No reduction in buffer width shall be provided based on the provision of a chain-link fence.
 - b. Fences shall be a minimum of six feet (6') in height unless paired with a berm and in such case the combination of berm and fence shall be a minimum of six feet (6') in height.
 - c. Breaks in the fence may be provided for pedestrian and vehicular connections to adjacent developments.
 - d. Fences shall be maintained in a structurally safe and attractive condition and with finished faces located towards the adjacent property.

E. Permitted use of buffer area. A buffer area shall not be used for anything except:

1. Passive recreation and picnic facilities, including pedestrian and bike trails.
2. Other appurtenances which require high visibility and easy access, such as fire hydrants and utilities, public and emergency telephones, mail boxes, and bus shelters, or benches, are also permitted in a buffer. No screening of such appurtenances shall be required or permitted.
3. Access ways when necessary to provide access to adjacent properties.
4. A required buffer is encouraged to retain areas of native habitat and may incorporate water resources including stormwater management facilities. However, the minimum width of the buffer shall be preserved as a planting area and there shall be no reduction in buffer width based on the stormwater management facilities.

F. Alternative compliance. The buffer requirements may be modified by the Board of Supervisors upon a finding that a modification would be consistent with the purpose of this ordinance, this section, and the adopted plans and policies of the county; that such modification would not adversely affect the land use compatibility or public interest; and that the subject parcel or modified buffer complies with one (1) or more of the following criteria:

1. The buffer is parallel and adjacent to an existing utility or drainage easement of at least one hundred feet (100') in width.
2. The buffer is between uses that are to be developed under a common development plan or series of development plans.
3. The buffer is parallel and adjacent to an existing railroad right-of-way;
4. The topography of the parcel is such that buffering would not be effective;
5. The property is adjacent to an established industrial use;
6. There is existing vegetation either on this lot or the adjacent lot to provide the required buffer benefits.

Financial hardship due to meeting the requirements of this section shall not be sufficient justification for alternative compliance.

G. Site Plan. Landscaping of buffer yards shall be shown on the site plan in accordance with the standards in Division J ARTICLE LXVII “Site Plan Review” and shall be provided and maintained in accordance with sound horticultural practices.

H. Fencing.

All property containing panels must be enclosed with chain link fencing seven feet (7') tall, topped with barbed wire, and secured with gates.

§ 25-70.7 Safety and Construction

A. Design

The applicant shall submit documentation that the design of any buildings and structures associated with or part of the solar energy project complies with applicable sections of the Virginia Uniform Statewide Building Code (USBC) (13VAC5-63). This requirement includes all electrical components of the solar energy project.

B. Construction and installation

In the construction and installation of a large solar energy system, the owner or operator shall install all electrical wires associated with the large solar energy system underground unless the applicant can demonstrate the necessity for aboveground installations as determined by the Board of Supervisors.

C. Ground water monitoring

Ground water monitoring to assess the level of groundwater contamination shall take place prior to and upon completion of construction of the project throughout the area of the solar energy system. Ground water monitoring shall take place every five (5) years of the operation of the project, and upon completion of decommissioning. Results from said monitoring shall be delivered to the Virginia Department of Health, Augusta County Department of Community Development and the Augusta County Service Authority.

Any adverse impacts identified will be mitigated by the owner of the solar energy facility to the property owner’s satisfaction.

D. Traffic Impact Statement and/or Analysis

As part of the project application, the applicant shall submit a traffic impact statement. If required by the Virginia Department of Transportation, the applicant shall submit a Traffic Impact Analysis found to be in compliance with the requirements of Chapter 527 (24VAC30-155).

§ 25-70.8 Decommissioning

A. Decommissioning plan

As part of the project application, the applicant shall submit a decommissioning plan, which shall include the following: (1) the anticipated life of the project; (2) the estimated decommissioning cost in current dollars; (3) how said estimate was determined; (4) the method of ensuring that funds will be available for decommissioning and restoration; (5) the method that the decommissioning cost will be kept current; and (6) the manner in which the project will be decommissioned and the site restored.

B. Discontinuation or Abandonment of Project

1. Thirty (30) days prior to such time that a large solar energy system is scheduled to be abandoned or discontinued, the owner or operator shall notify the Director of Community Development by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Any solar project that has been inoperable or unutilized for a period of 12 consecutive months shall be deemed abandoned and subject to the requirements of this section.
2. Within 365 days of the date of abandonment or discontinuation, the owner or operator shall complete the physical removal of the solar energy project and site restoration. This period may be extended at the request of the owner or operator, upon approval of the Board of Supervisors.
3. Decommissioning of discontinued or abandoned large solar energy systems shall include the following:
 - a) Physical removal of all solar energy equipment and above-ground appurtenant structures from the subject property including, but not limited to, buildings, machinery, equipment, cabling and connections to transmission lines, equipment shelters, security barriers, electrical components, roads, unless such roads need to remain to access buildings retrofitted for another purpose, or the landowner submits a request to the Board of Supervisors that such roads remain.
 - b) Below-grade structures, such as foundations, underground collection cabling, mounting beams, footers, and all other equipment installed with the system shall be **completely** removed: however, these structures may be allowed to remain if a written request is submitted by the landowners and a waiver is granted by the Board of Supervisors.
 - c) Compacted soils shall be decompacted as agreed to by the landowner.

- d) Restoration of the topography of the project site to its pre-existing condition, except that any landscaping or grading may remain in the after-condition if a written request is submitted by the landowner and a waiver is granted by the Board of Supervisors.
- e) Proper disposal of all solid or hazardous materials and wastes from the site in accordance with local, state, and federal solid waste disposal regulations.

§ 25-70.9 Bonding

Prior to the issuance of a Building Permit for a solar energy system, the applicant shall:

- A. Submit to the Zoning Administrator an itemized cost estimate of the work to be done to completely remove the entire solar energy system plus twenty-five percent (25%) of said estimated costs as a reasonable allowance for administrative costs, inflation, and potential damage to existing roads or utilities.
- B. Submit a bond, irrevocable Letter of Credit, or other appropriate surety acceptable to the County in the amount of the estimate as approved by the Zoning Administrator shall:
 - 1. Secure the cost of removing the system and restoring the site to its original condition to the extent reasonably possible; and
 - 2. Include a mechanism for a Cost of Living Adjustment after ten (10) and fifteen (15) years.
- C. The applicant will ensure the bond, irrevocable Letter of Credit, or other surety shall remain in full force and effect until the Community Development Department has inspected the site and verified that the solar energy system has been removed. At which time the Community Development Department shall promptly release the bond, irrevocable Letter of Credit, or other surety.

Ord. 6/27/18